

Application No. 10/075,833

Attorney Docket No. PF010013

IN THE CLAIMS

Claims 1 – 12 are pending in this application with claims 1, 4 - 5, 8 - 9 and 12 being amend by this response and claims 3, 7 and 11 being cancelled by this response.

1. (Currently Amended) A method for automatically controlling the gain in a radiofrequency signal reception device, said device comprising at least one first low-noise amplification stage placed following a reception antenna, and at least one variable-gain device placed in the reception facility, the method comprising the steps of:

neutralization of the signal received by the antenna; and  
adjustment of the gain during the neutralization of the signal received until a predetermined noise level is obtained at the end of the reception facility wherein, during signal reception, the following steps are performed:  
extraction of the thermal noise power at the end of the reception facility; and  
adjustment of the gain until a predetermined noise level is obtained.

2. (Previously Presented) The method according to Claim 1, wherein the neutralization of the signal received is carried out by cutting off the supply to the first low-noise amplification stage.

3. (Cancelled)

4. (Currently Amended) The method according to Claim 3 1, wherein the extraction of the noise power at the end of the facility is carried out by performing the following steps:

sampling and digitization of the signal at the end of the reception facility;  
digital demodulation of the digitized signal;  
modulation of the demodulated signal; and  
calculation of the noise power from the modulated signal and the digitized signal.

5. (Currently Amended) A radio frequency signal reception device, said device comprising:

at least one first low-noise amplification stage placed following a reception antenna;

at least one variable-gain device placed in the reception facility;

Application No. 10/075,833

Attorney Docket No. PF010013

means for neutralizing the signal received by the antenna; and  
means for adjusting the variable-gain device as a function of the noise level at the end of the reception facility, wherein said device further comprises:  
means for extracting the thermal noise power during the reception of the signal; and  
means for adjusting the variable -gain device as a function of the noise level extracted.

6. (Previously Presented) The device according to Claim 5, wherein the means for neutralizing the signal received are switching means which switch the supply of the first amplification stage.

7. (Cancelled)

8. (Currently Amended) The device according to Claim 7~~5~~, wherein the means for extracting the noise power during reception further comprises:  
means of sampling and means of converting the signal at the end of the facility into a digitized signal;  
means for performing the digital demodulation of the signal and for obtaining a demodulated signal;  
digital modulation means for modulating the demodulated signal and obtaining a modulated signal; and  
means for calculating the noise power from the modulated signal and the digitized signal.

9. (Currently Amended) A device for transmitting/receiving radiofrequency signals transmitted by a satellite comprising:  
at least one first low-noise amplification stage placed following a reception antenna; and  
at least one variable-gain device placed in the reception facility, wherein said device further comprises:  
means for extracting the thermal noise power during the reception of the signal; and  
means for adjusting the variable -gain device as a function of the noise level extracted.

Application No. 10/075,833

Attorney Docket No. PF010013

10. (Previously Presented) The device according to Claim 9, wherein the means for neutralizing the signal received are switching means which switch the supply of the first amplification stage.

11. (Cancelled)

12. (Currently Amended) The device according to Claim ~~11~~9, wherein said means for extracting the noise power during reception includes:

- sampling means and means of converting the signal at the end of the facility into a digital signal;
- means for performing the digital demodulation of the signal and for obtaining a demodulated signal;
- means of digital modulation for modulating the demodulated signal and obtaining a modulated signal; and
- means for calculating the noise power from the modulated signal and the digitized signal.